

C 52.11: C 61

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~~THE PENNSYLVANIA STATE UNIVERSITY~~  
**SELECTED CLIMATIC MAPS**  
**OF THE**  
**UNITED STATES**

ENVIRONMENTAL DATA SERVICE  
 Prepared by Office of Data Information

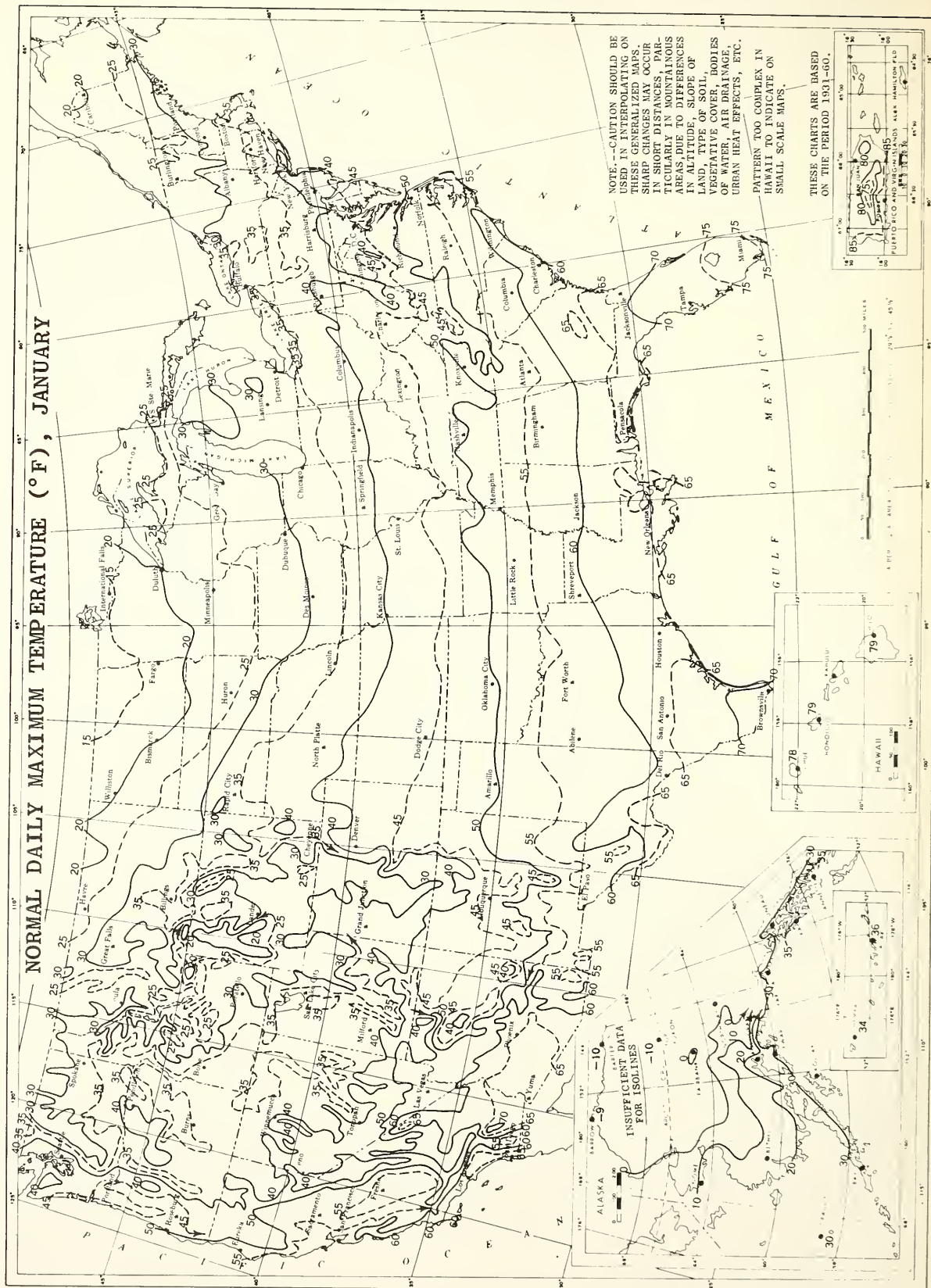


## Title

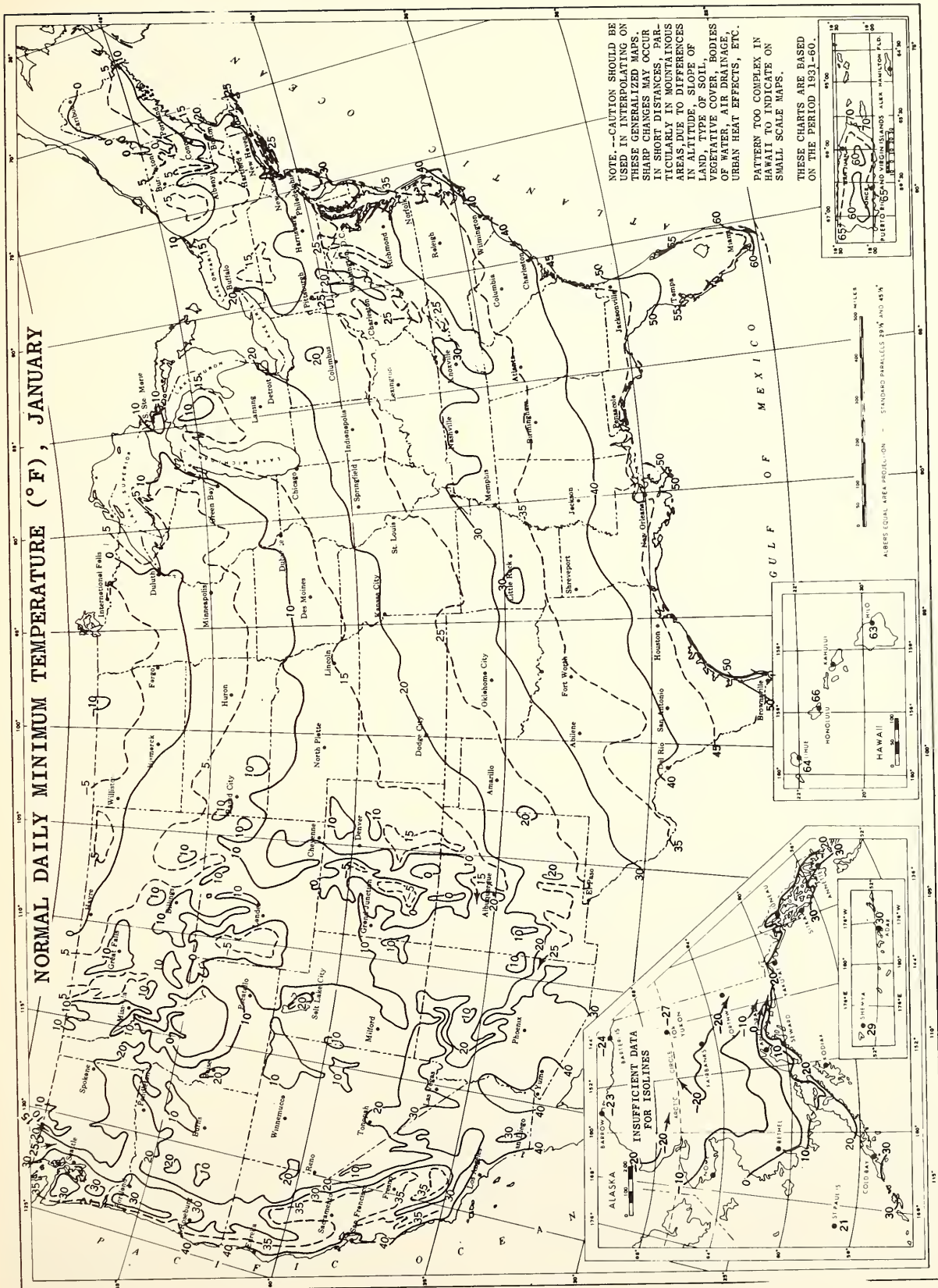
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# NORMAL DAILY MAXIMUM TEMPERATURE (°F), JANUARY

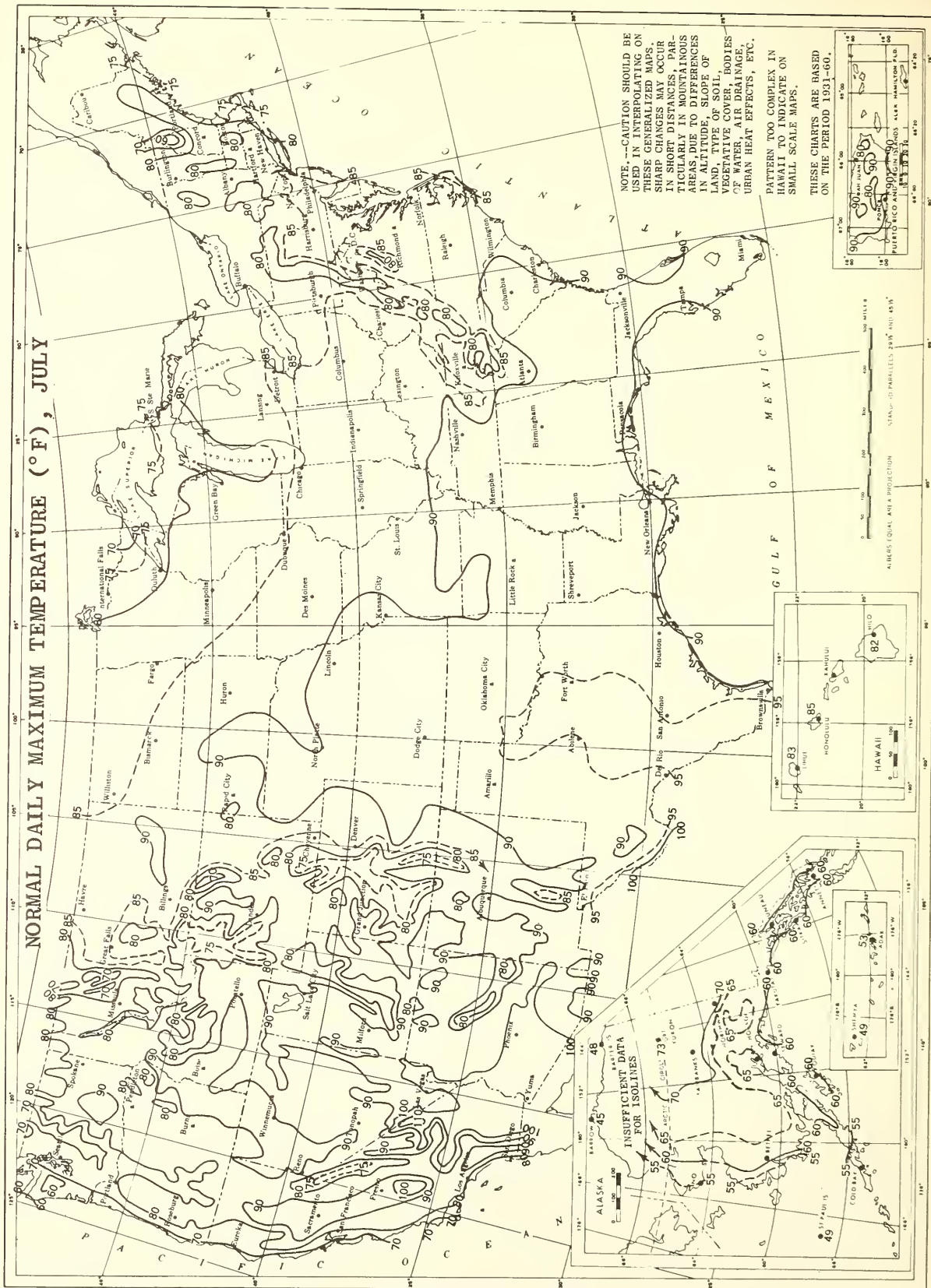


# NORMAL DAILY MINIMUM TEMPERATURE (°F), JANUARY





# NORMAL DAILY MAXIMUM TEMPERATURE (°F), JULY



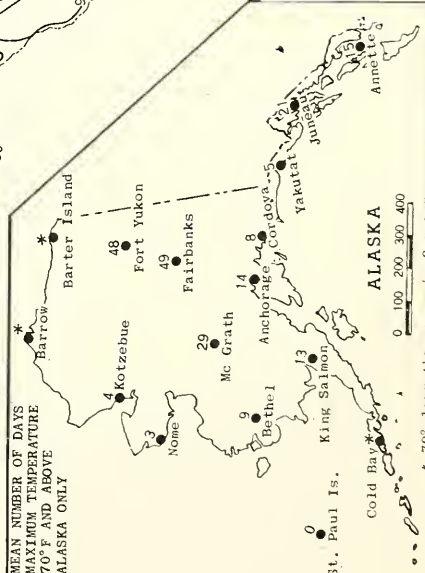
PATTERN TOO COMPLEX IN HAWAII TO INDICATE ON SMALL SCALE MAPS.

MEAN ANNUAL NUMBER OF DAYS MAXIMUM TEMPERATURE  $90^{\circ}\text{F}$  AND ABOVE  
Except  $70^{\circ}\text{F}$  and Above in Alaska

NOTE.--Caution should be used in interpolating on this generalized map. Sharp changes in the mean number of days with maximum temperature above may occur in short distances, due to differences in altitude, type of soil, vegetative cover, bodies of water, air drainage, urban heat effects, etc.

Barrow  
Kotzebue  
Nome  
Fairbanks  
Fort Yukon  
Barter Island

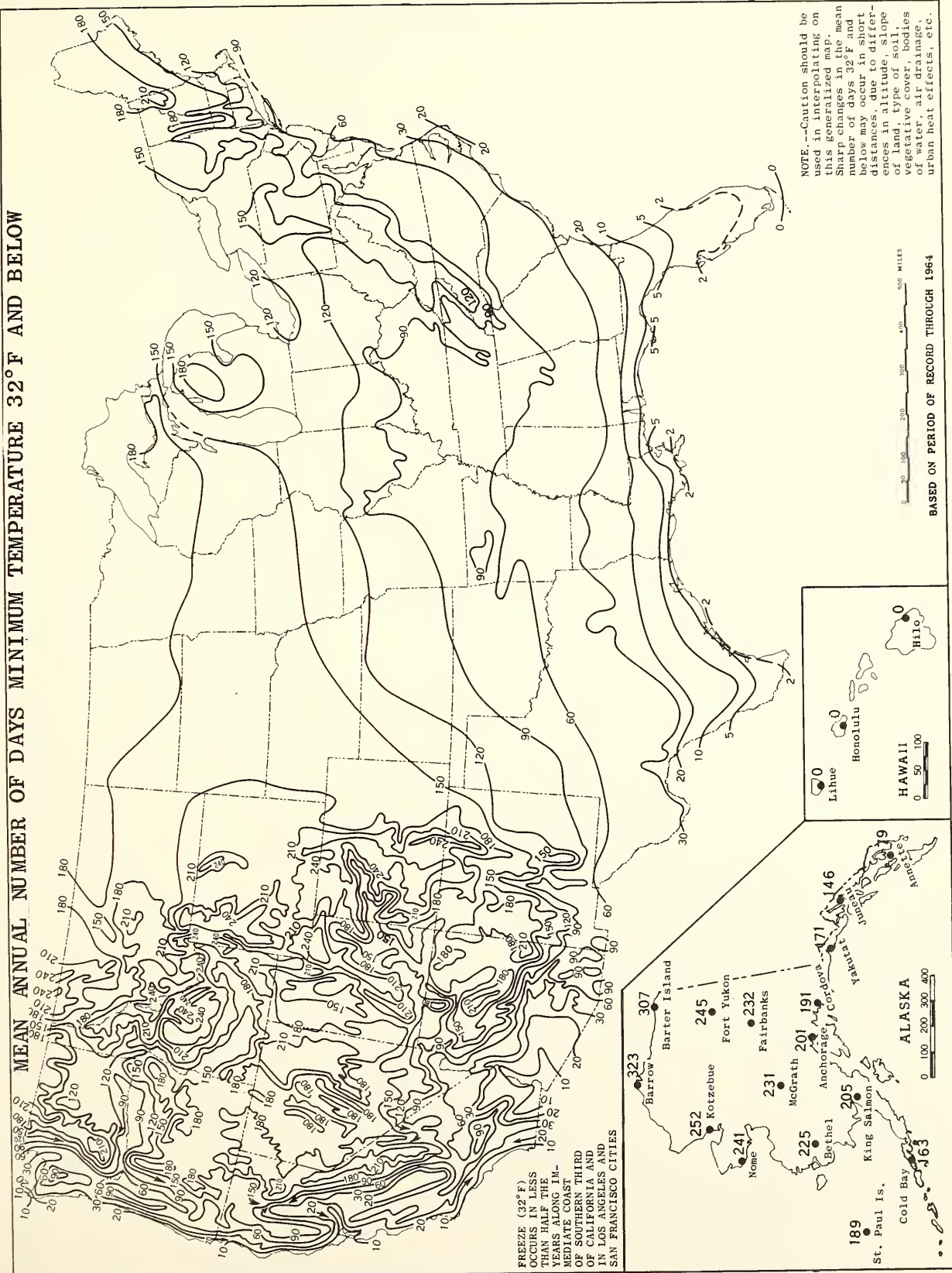
MEAN NUMBER OF DAYS  
MAXIMUM TEMPERATURE  
70°F AND ABOVE  
ALASKA ONLY



\* 90° less than once in 2 years.



# MEAN ANNUAL NUMBER OF DAYS MINIMUM TEMPERATURE 32°F AND BELOW

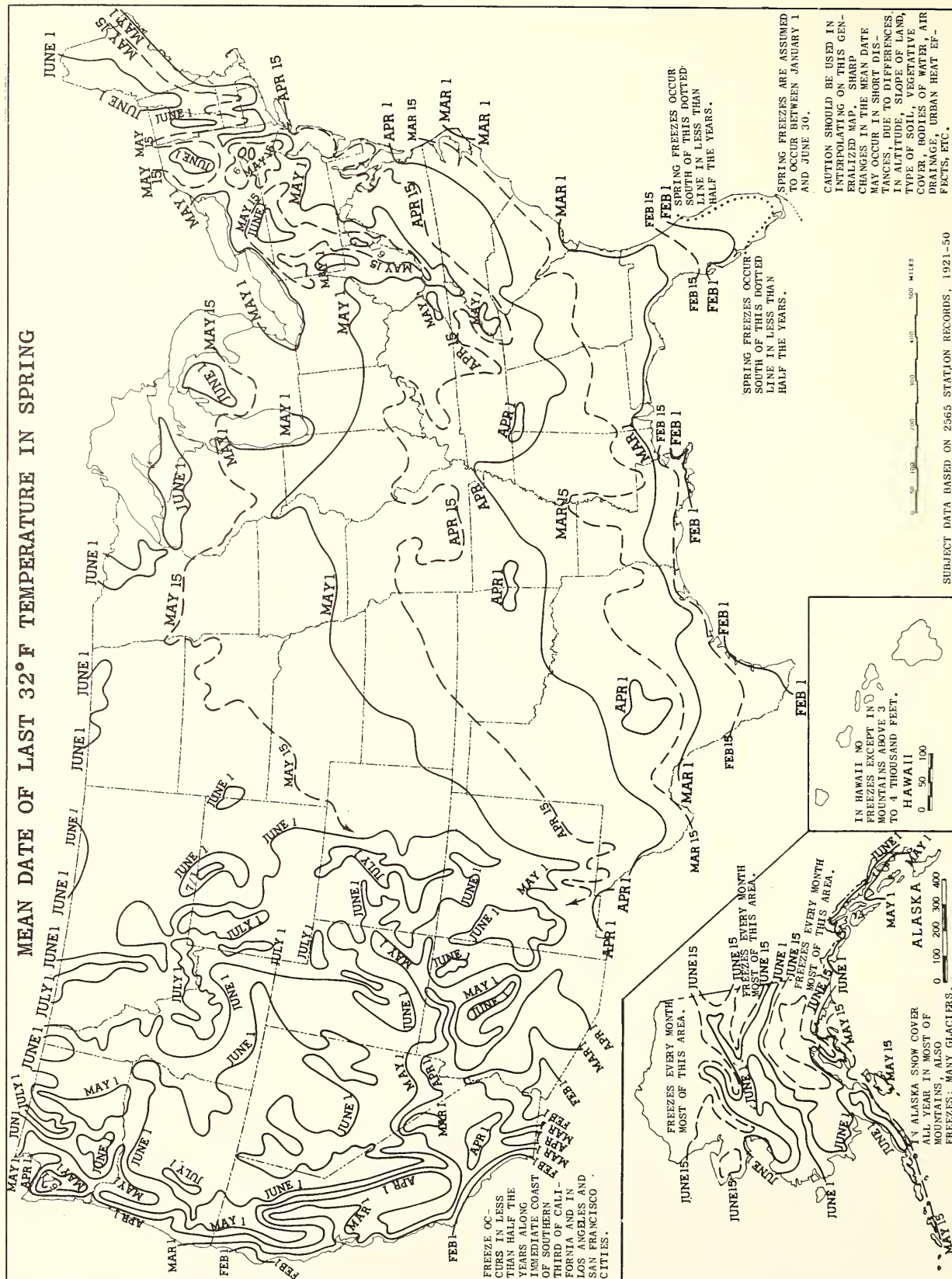






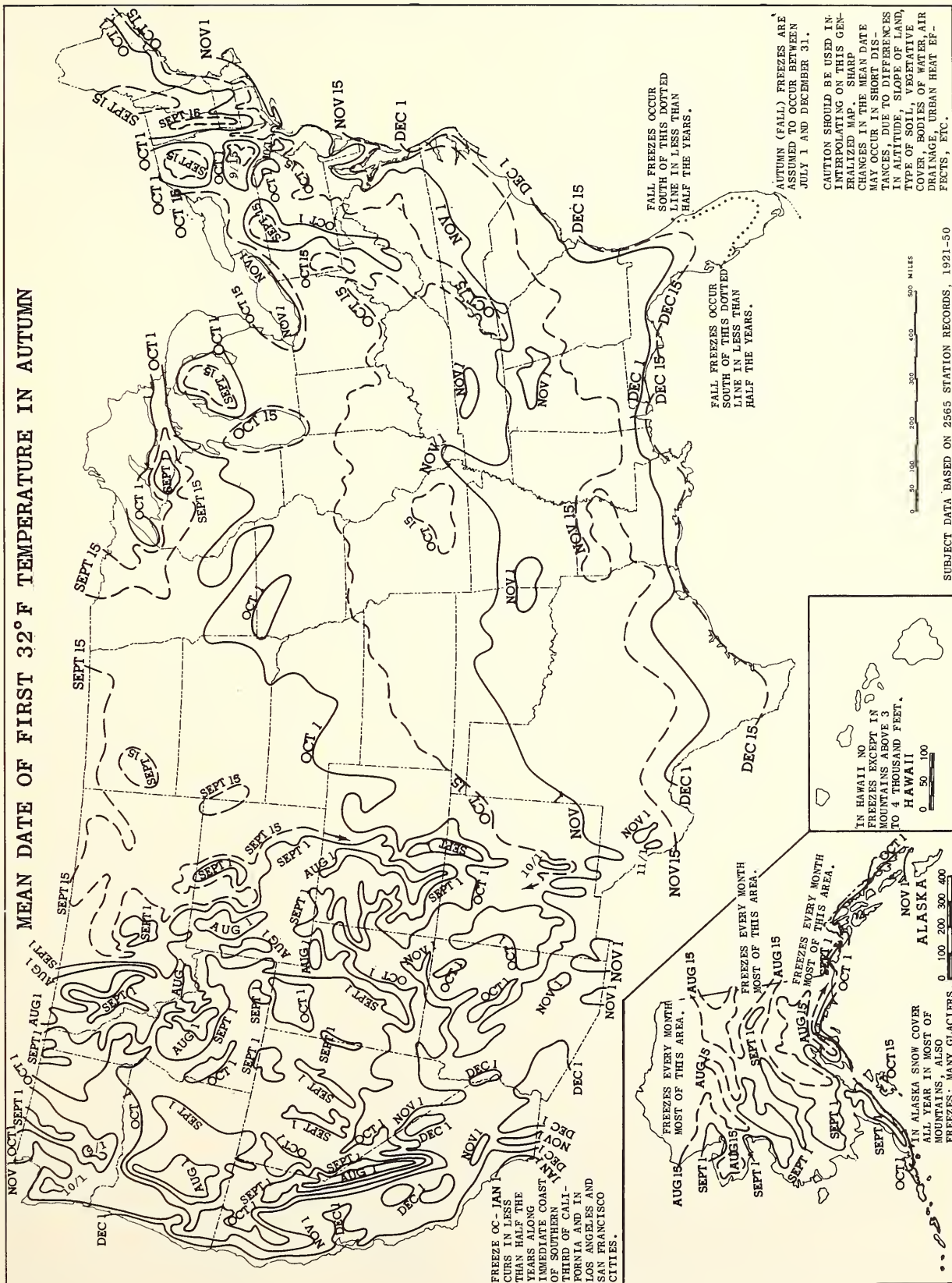


# MEAN DATE OF LAST 32°F TEMPERATURE IN SPRING

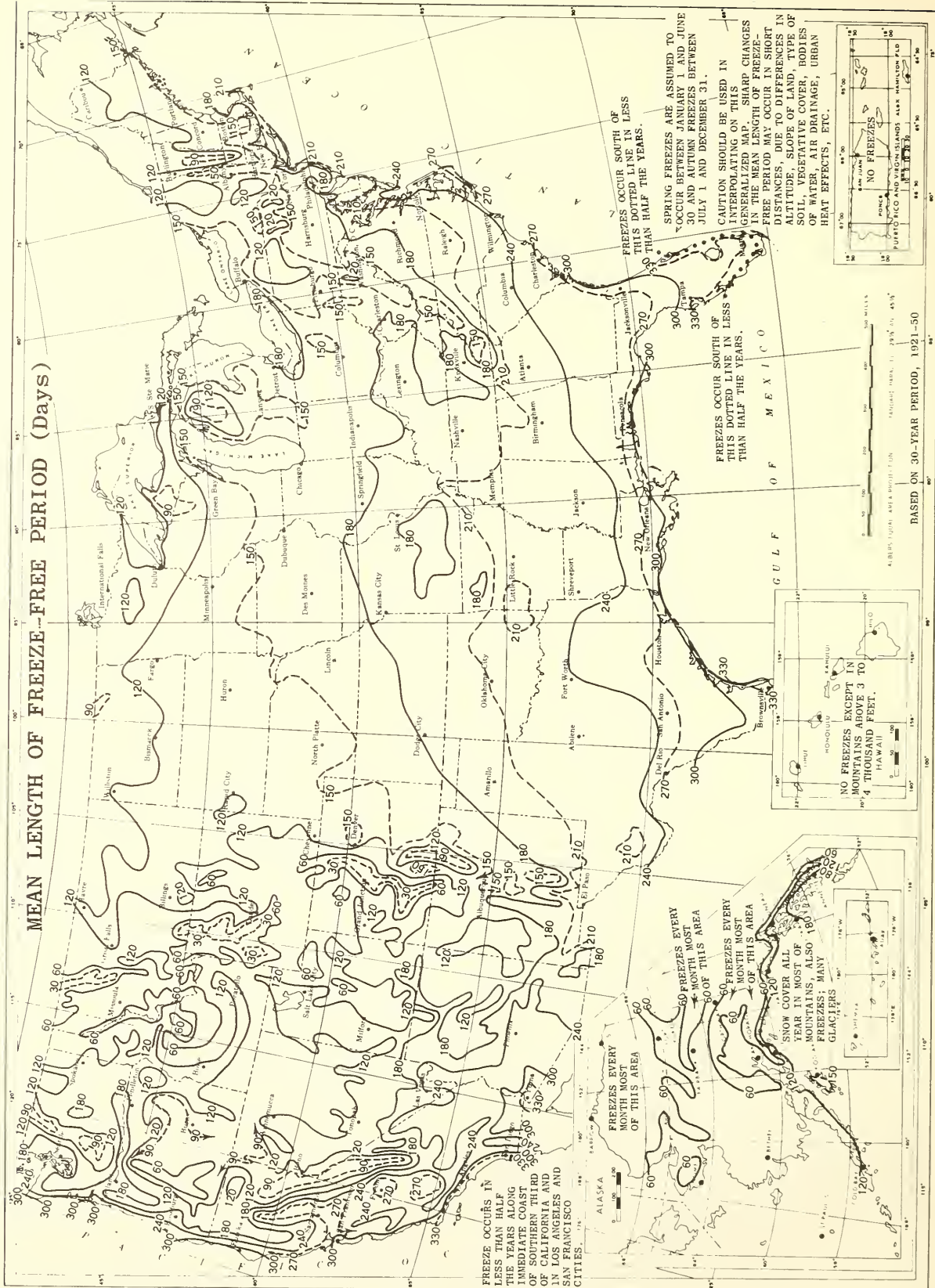




# MEAN DATE OF FIRST 32°F TEMPERATURE IN AUTUMN

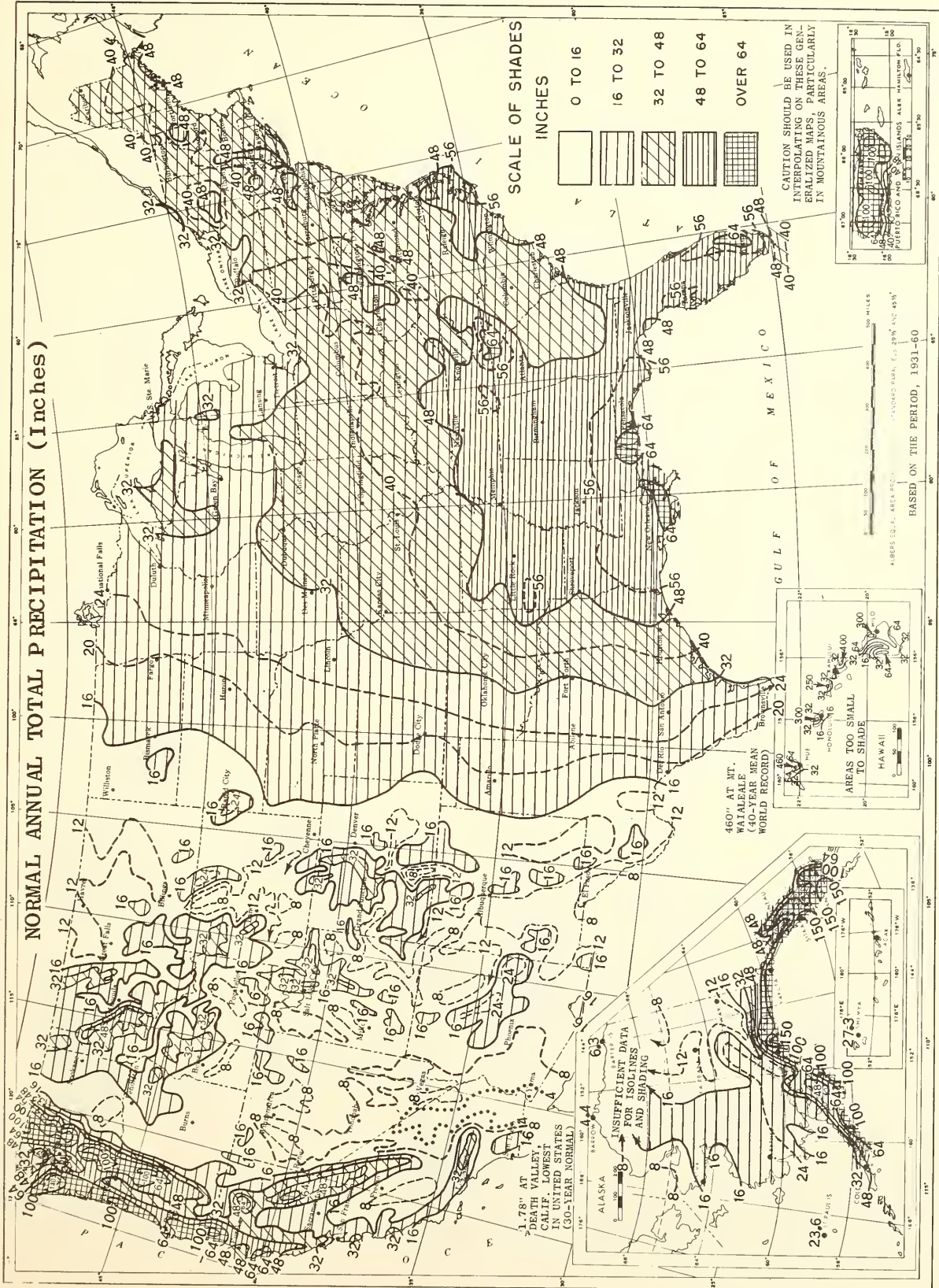


# MEAN LENGTH OF FREEZE-FREE PERIOD (Days)

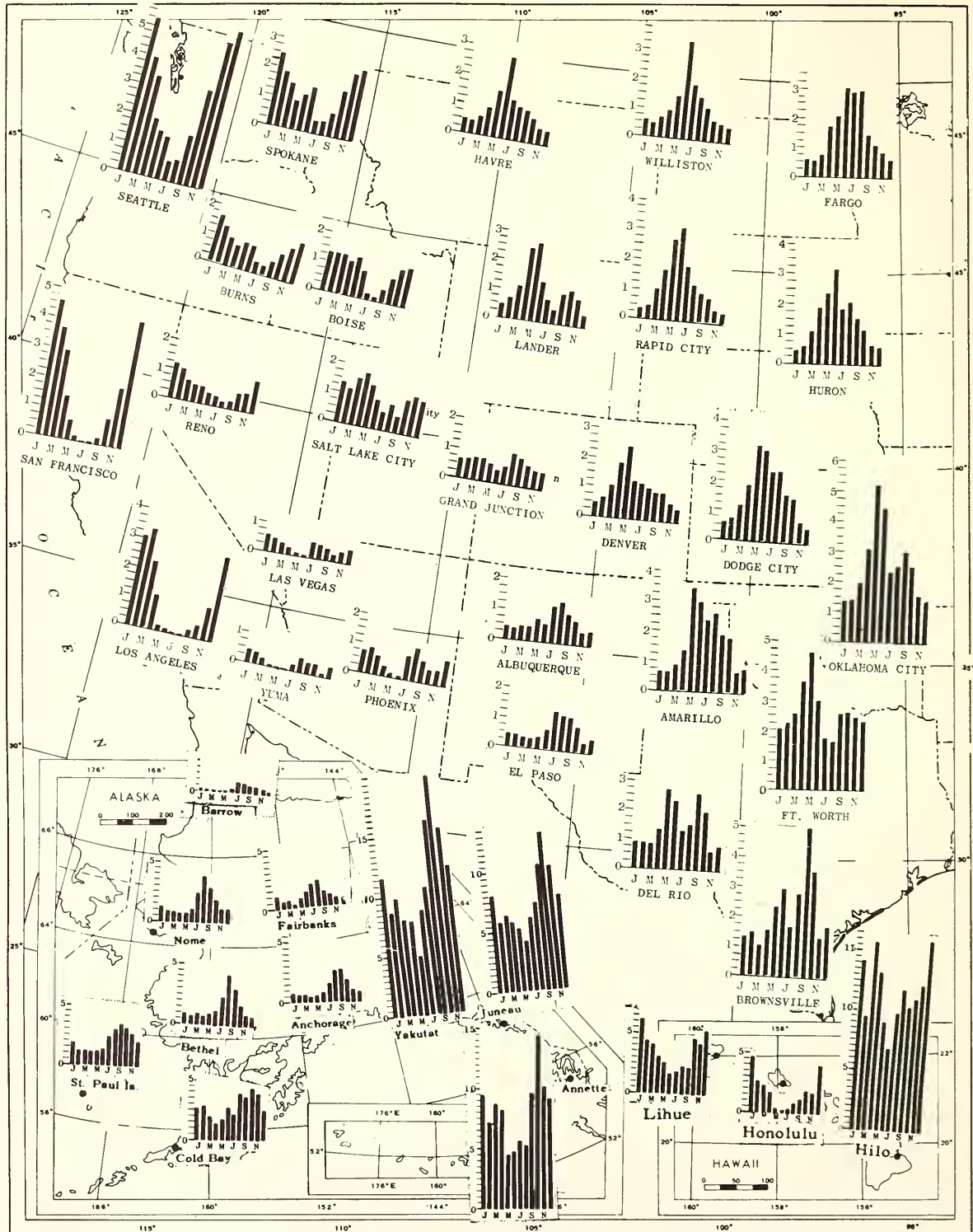




# NORMAL ANNUAL TOTAL PRECIPITATION (Inches)



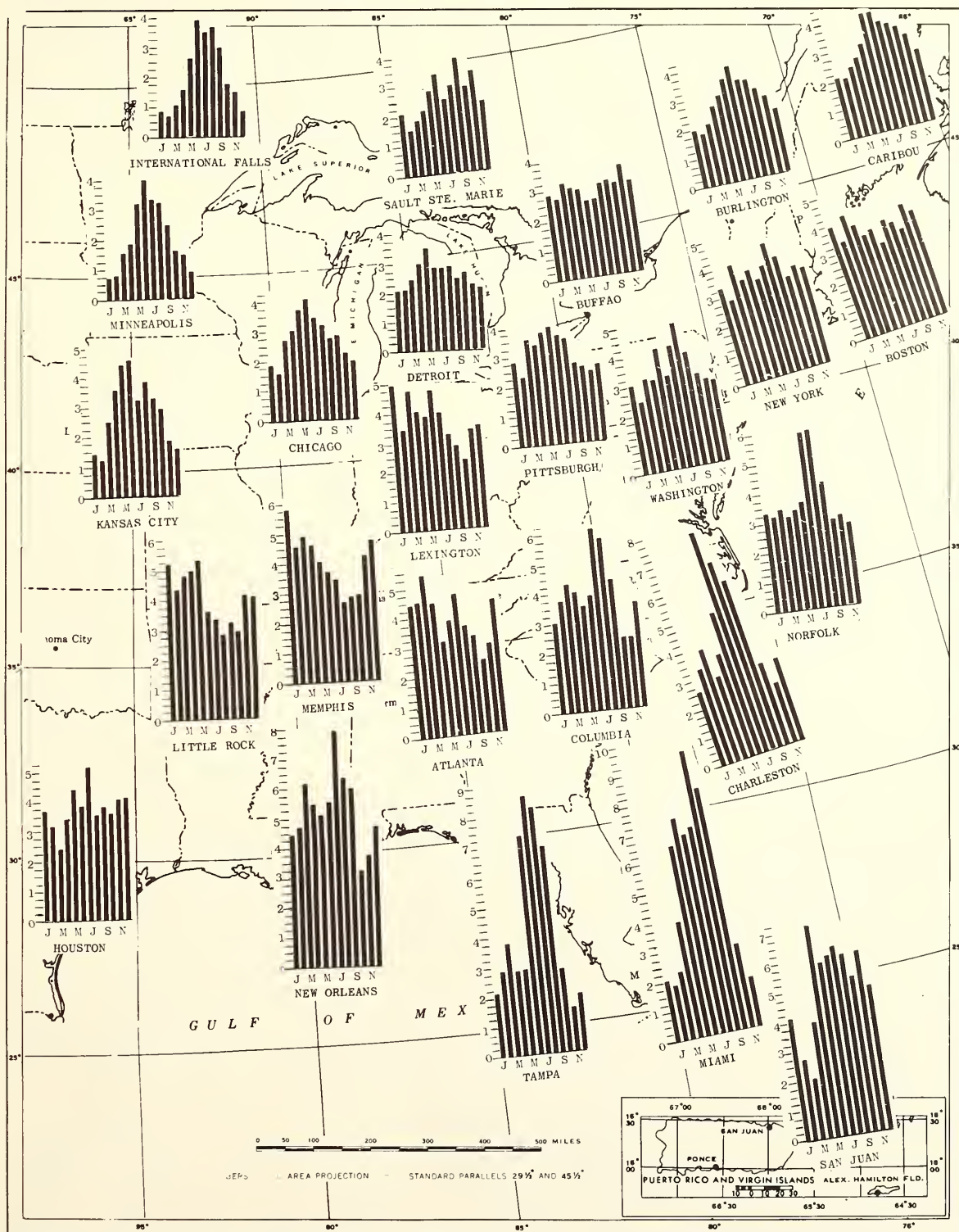
# NORMAL MONTHLY TOTAL PRECIPITATION (Inches) WESTERN UNITED STATES For Selected Stations



Based on 30-year Period, 1931-60



# NORMAL MONTHLY TOTAL PRECIPITATION (Inches) EASTERN UNITED STATES For Selected Stations



Based on 30-year Period, 1931-60

BASED ON PERIODS OF RECORD  
THROUGH 1964.  
ISOLINES ARE DRAWN THROUGH  
POINTS OF APPROXIMATELY EQUAL  
VALUE.  
CAUTION SHOULD BE USED IN IN-  
TERPOLATING ON THIS SMOOTHED  
MAP, PARTICULARLY IN MOUNTAINOUS  
AREAS.

HAWAII

ALASKA

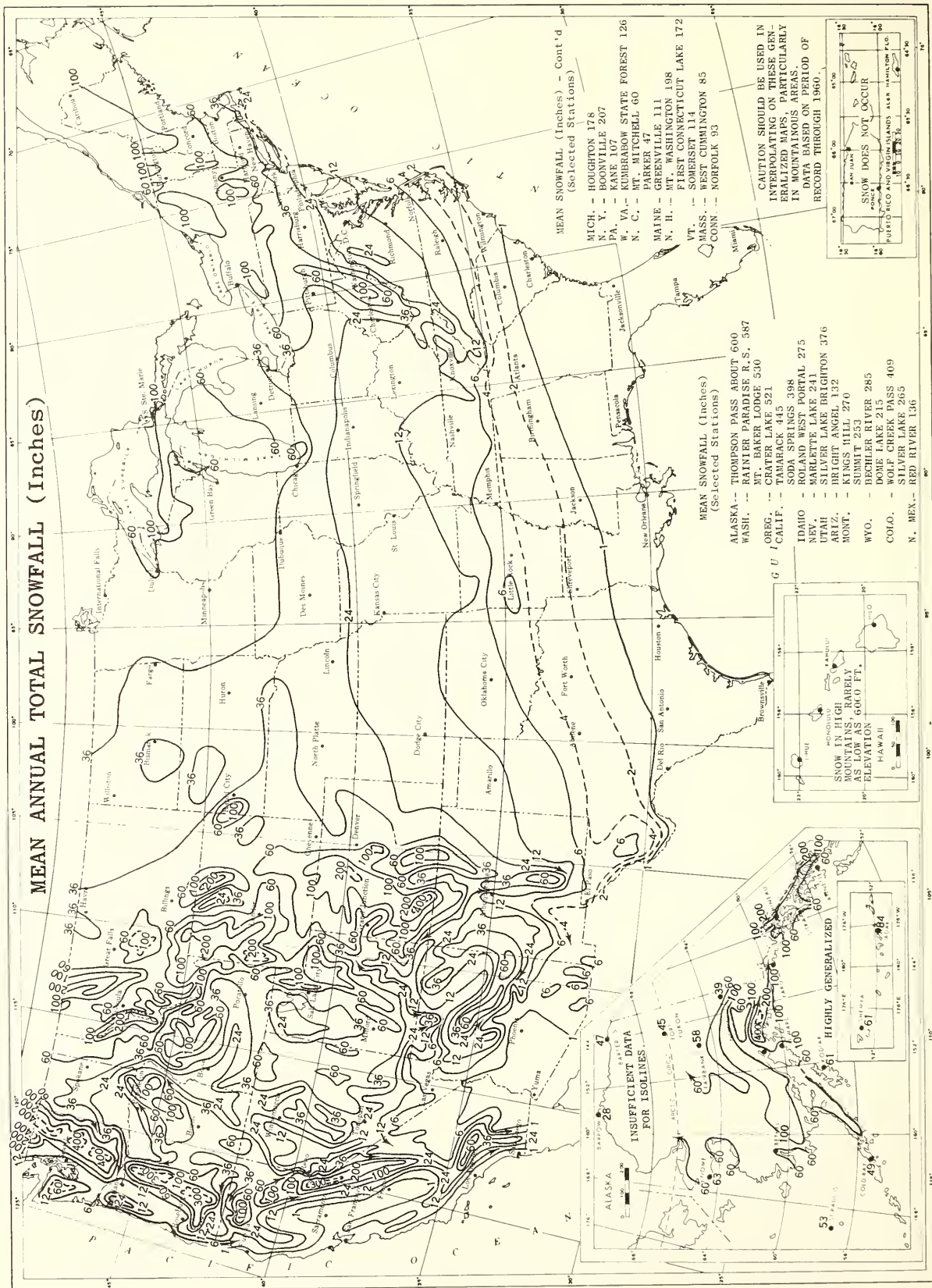


**MEAN ANNUAL NUMBER OF DAYS WITH THUNDERSTORMS**

BASED ON PERIOD OF RECORD THROUGH 1964

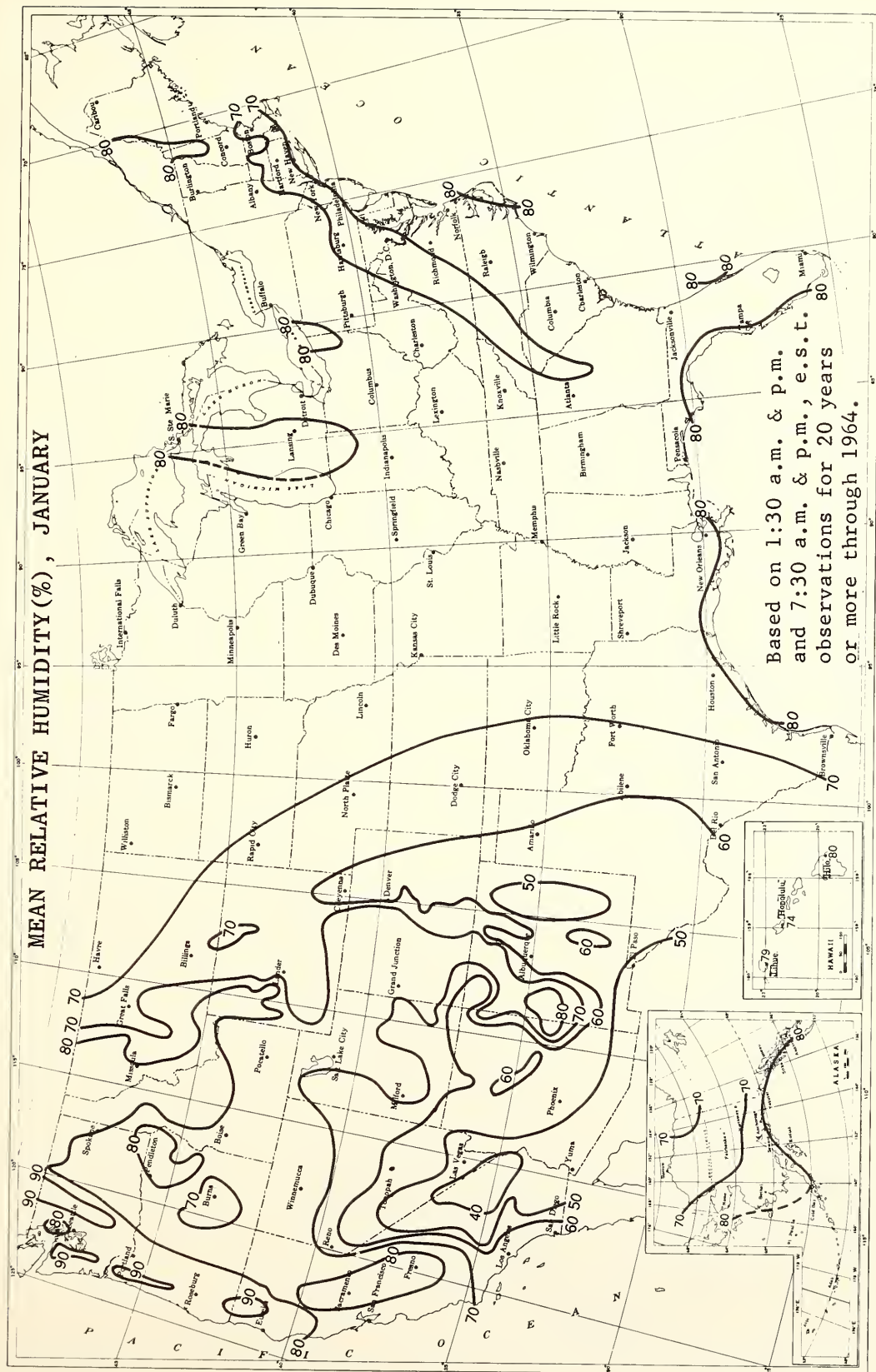
Map showing the mean annual number of days with thunderstorms in the United States, based on the period of record through 1964. The map displays contour lines representing the number of days, with values ranging from 5 to 100. Major cities and geographical features are labeled. An inset map shows the Gulf of Mexico and the Caribbean Sea, and another inset shows the Hawaiian Islands. A scale bar indicates distances in miles.

# MEAN ANNUAL TOTAL SNOWFALL (Inches)

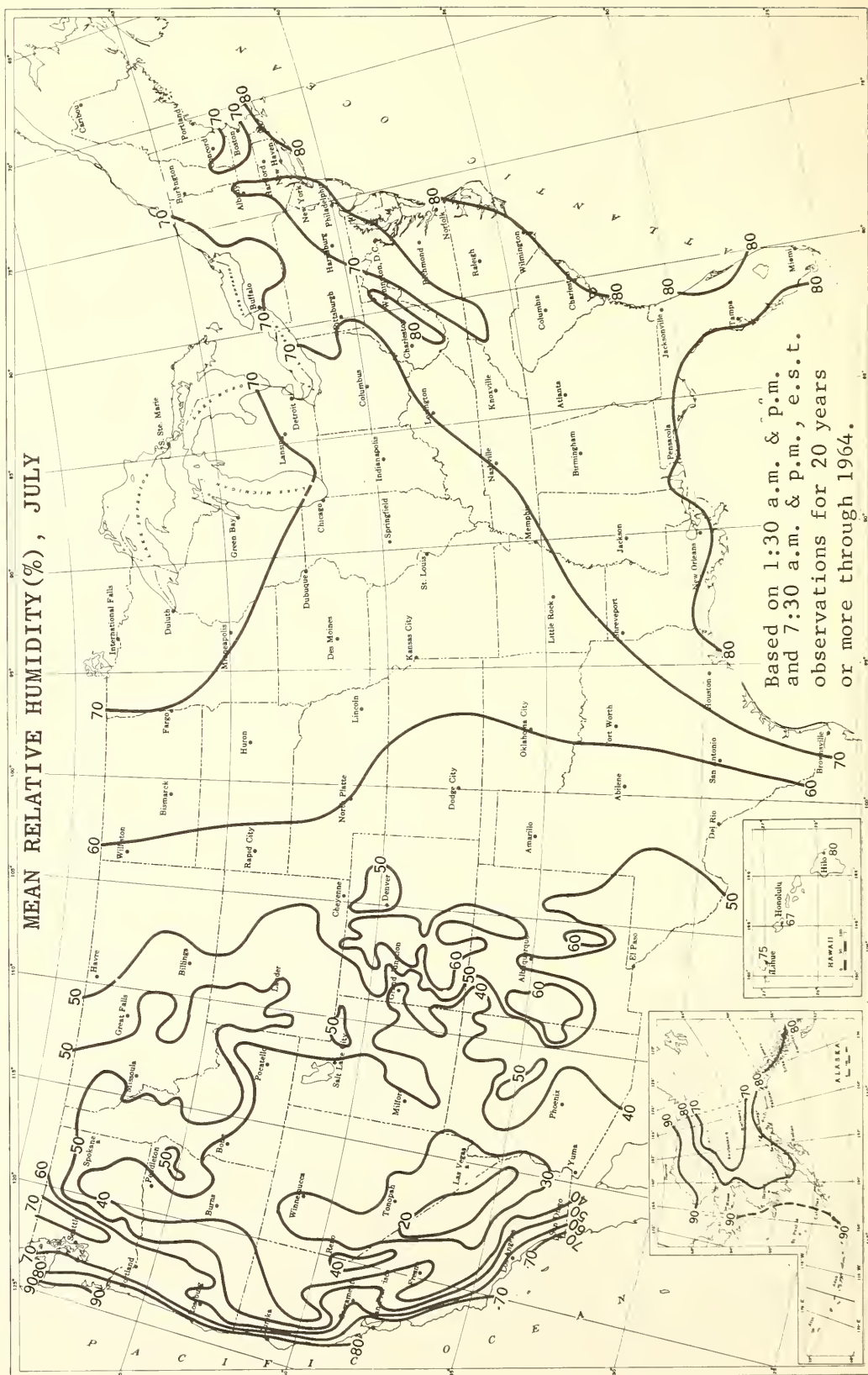




# MEAN RELATIVE HUMIDITY(%) , JANUARY



## MEAN RELATIVE HUMIDITY (%), JULY

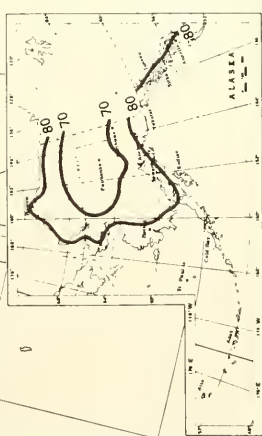




**MEAN ANNUAL RELATIVE HUMIDITY (%)**

Based on 1:30 a.m. & p.m. and 7:30 a.m. & p.m., e.s.t. observations for 20 years or more through 1964.

A map of the Hawaiian Islands showing the locations of the three study sites. The sites are marked with numbers: 77 for Lihue, 70 for Honolulu, and 81 for Hilo. The map includes latitude and longitude coordinates and a scale bar.



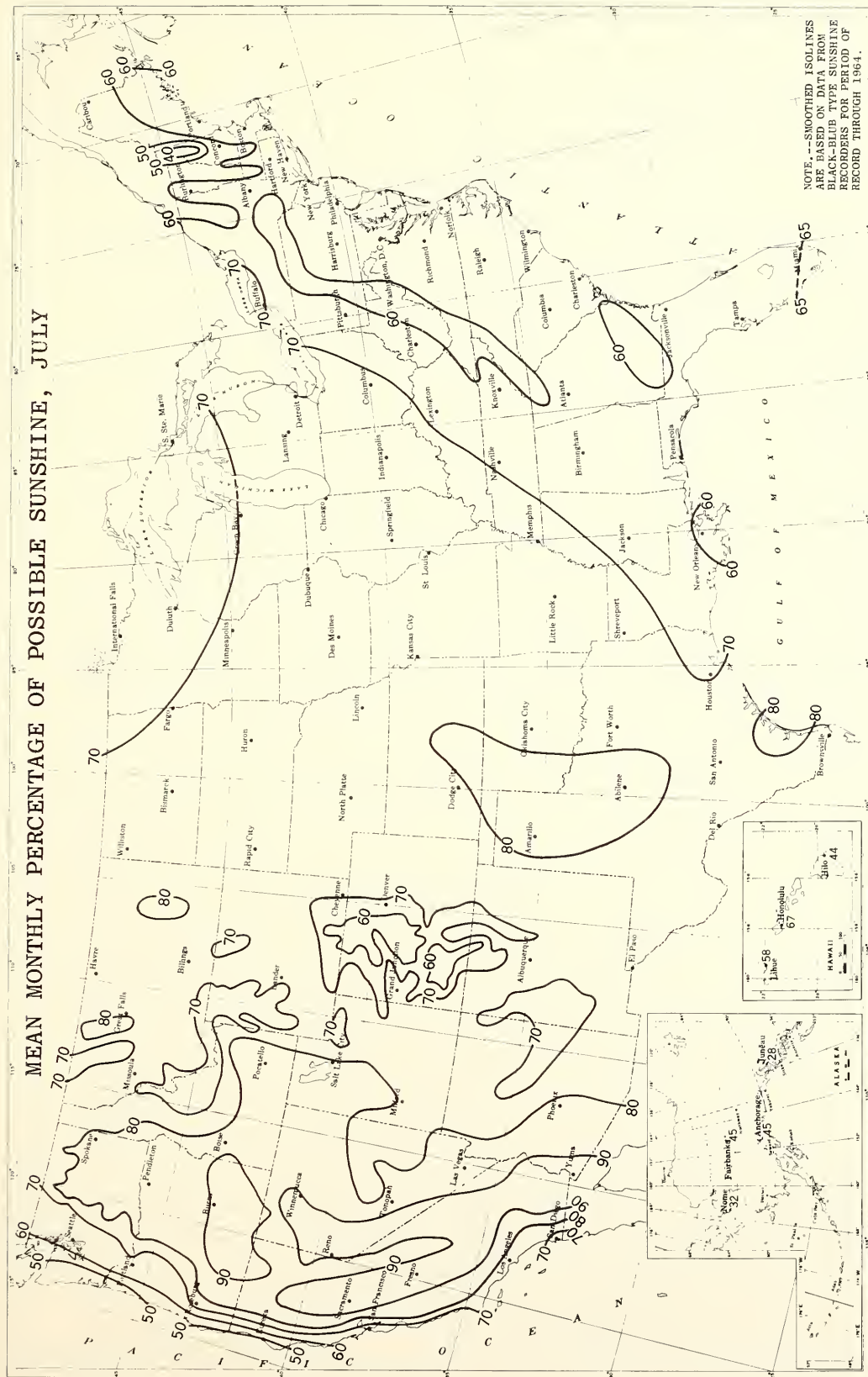
MEAN MONTHLY PERCENTAGE OF POSSIBLE SUNSHINE, JANUARY

NOTE.—SMOOTHED ISOHYALS  
AND BASED ON DATA FROM  
BLACK-BLUE TYPE SUNSHINE  
RECORDERS FOR PERIOD OF  
RECORD THROUGH 1964.

NOTE.--SMOOTHED ISOLINES ARE BASED ON DATA FROM BLACK-BLUB TYPE SUNSHINE RECORDERS FOR PERIOD OF RECORD THROUGH 1964.

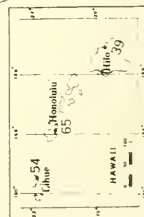


# MEAN MONTHLY PERCENTAGE OF POSSIBLE SUNSHINE, JULY



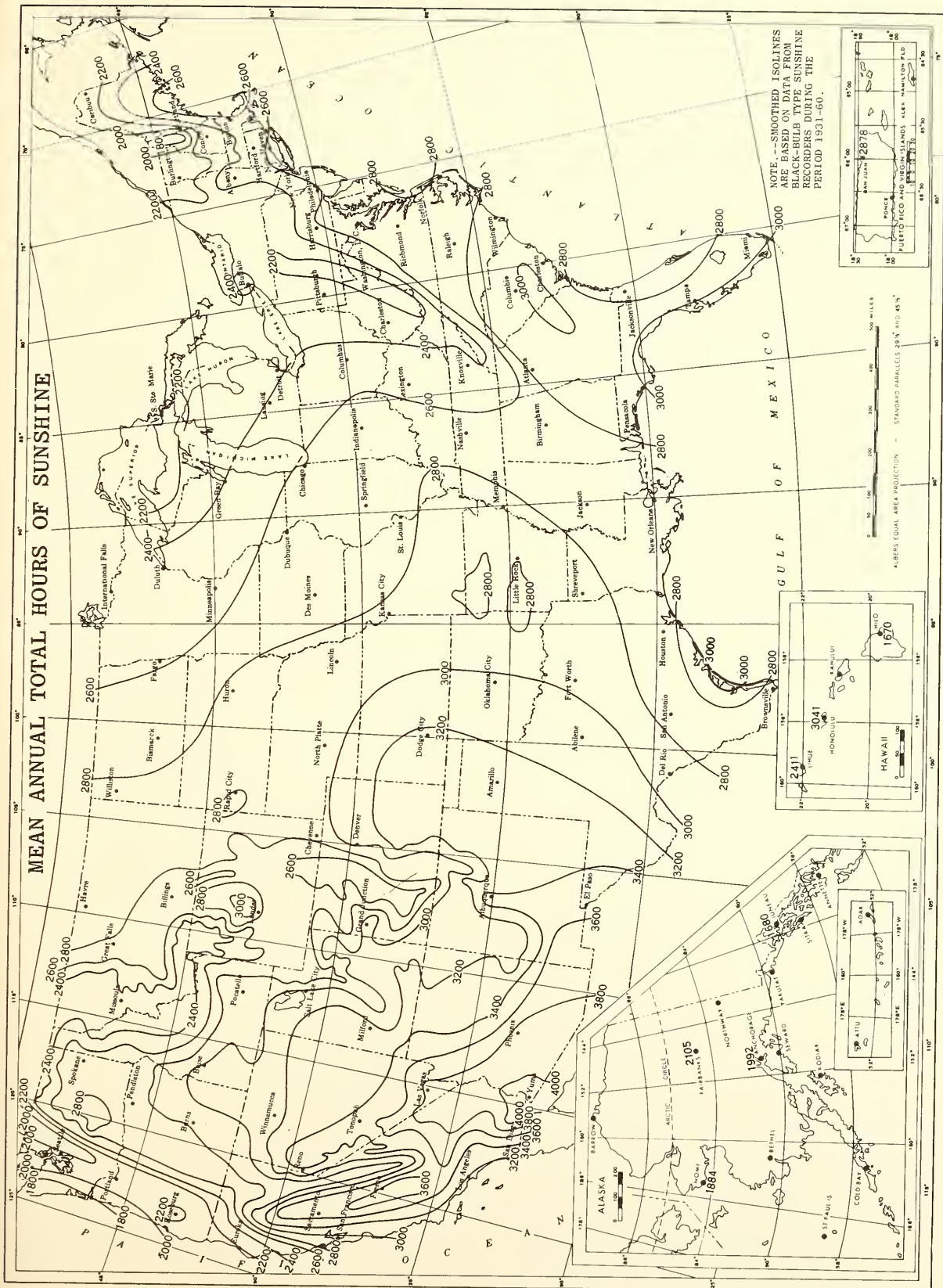
NOTE.—SMOOTHED ISOINES ARE BASED ON DATA FROM 1941-1950. SHADINGS ARE BASED ON RECORDS FOR PERIOD OF RECORD THROUGH 1964.

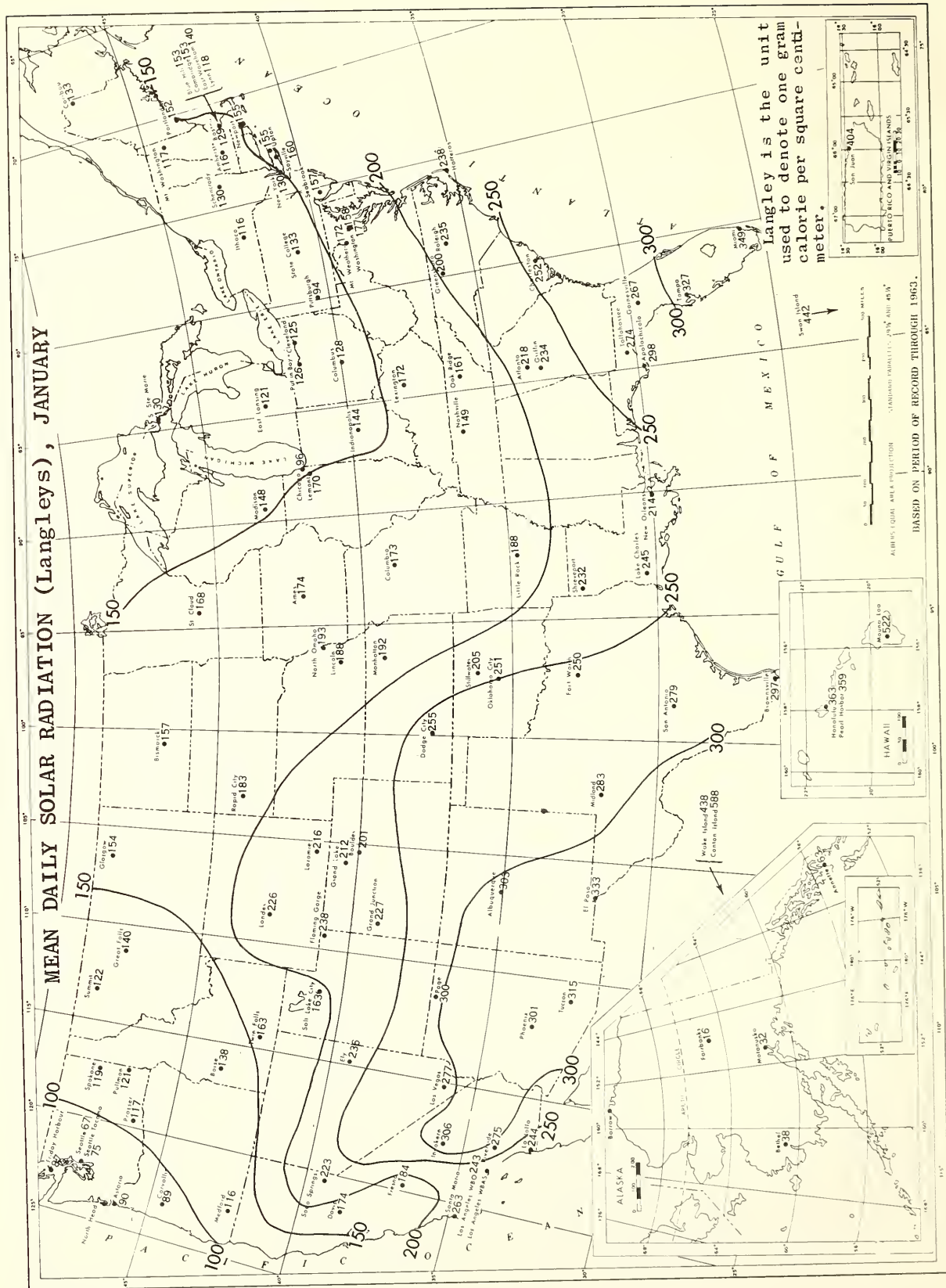
OXFORD



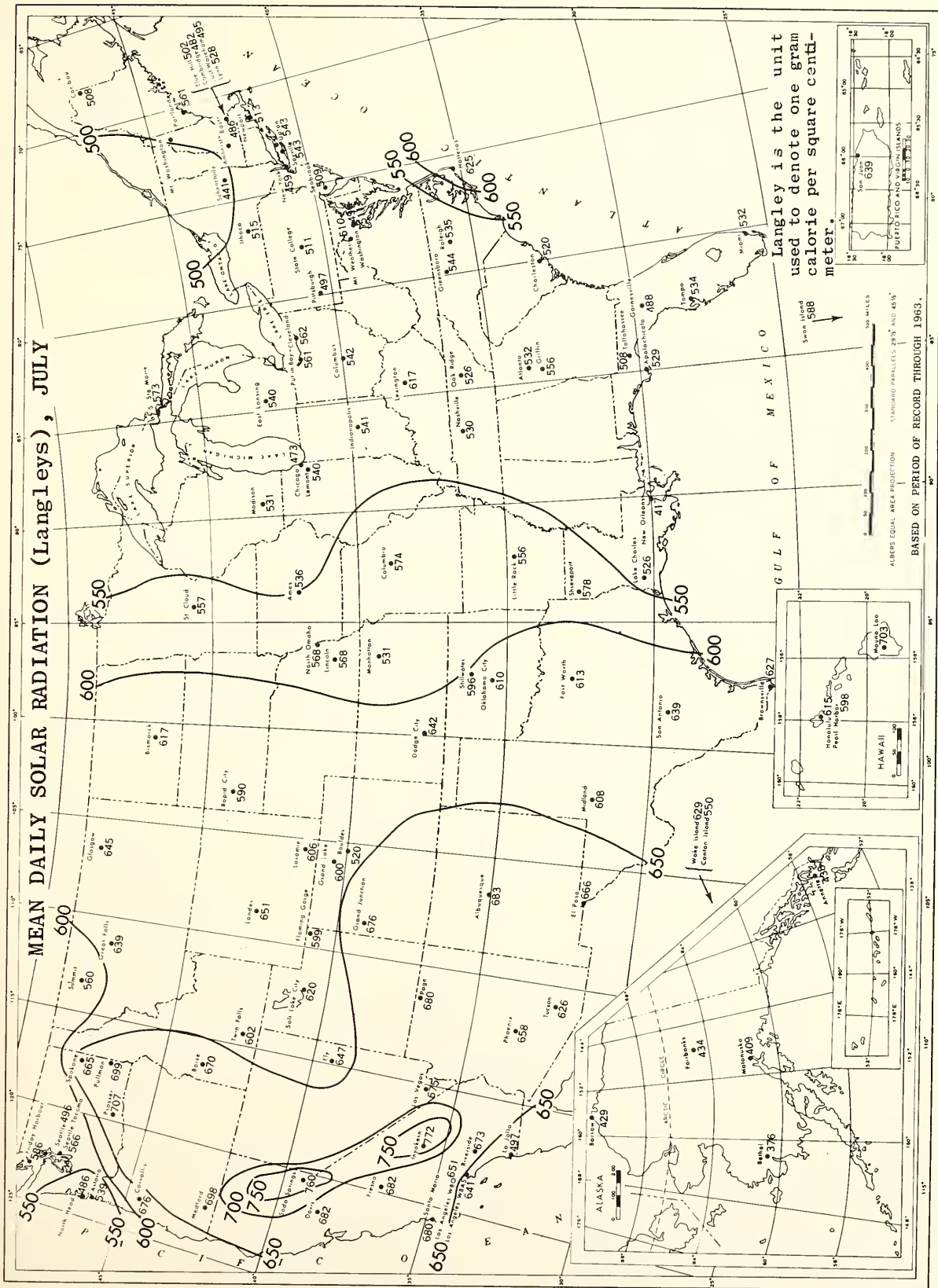


MEAN ANNUAL TOTAL HOURS OF SUNSHINE





# MEAN DAILY SOLAR RADIATION (Langley's), JULY



Langley is the unit used to denote one gram calorie per square centimeter.

BASED ON PERIOD OF RECORD THROUGH 1963.

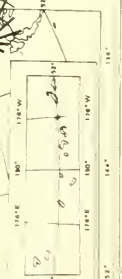
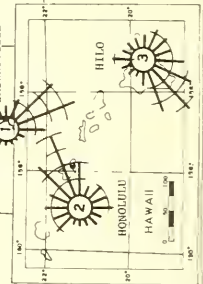
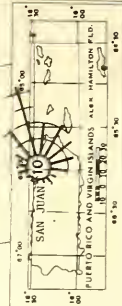


[illegible]

LEGEND:  
WINDROSES SHOW PERCENTAGE  
OF TIME WIND BLEW FROM THE  
16 COMPASS POINTS OR WAS CALM.

\* INDICATES LESS THAN 0.5% CALM.

25 HOURLY PERCENTAGES 25



**SURFACE WIND ROSES, JULY**

**NOTE: Based on Hourly Observations 1951-60**

**LEGEND:**  
 WINDROSES SHOW PERCENTAGE OF TIME WIND BLEW FROM THE 16 COMPASS POINTS OR WAS CALM.  
 \* INDICATES LESS THAN 0.5% CALM.

**25 HOURLY PERCENTAGES 25**

**GULF OF MEXICO**

**ALASKA**

**SEATTLE**

**PORTLAND**

**SPOKANE**

**GREAT FALLS**

**BILLINGS**

**CASPER**

**BOISE**

**POCATELLO**

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**WICHITA**

**DOUGLAS**

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NOTE: Based on Hourly Observations 1951-60.

LEGEND:  
WINDROSES SHOW PERCENTAGE  
OF TIME WIND BLEW FROM THE  
16 COMPASS POINTS OR WAS CALM.



**SURFACE WIND ROSES, ANNUAL**

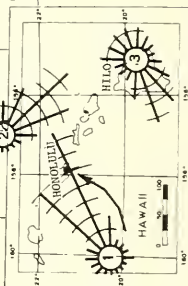
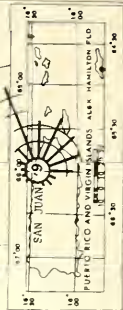
**NOTE: Based on Hourly Observations 1951-60**

**LEGEND**  
 WINDROSES SHOW PERCENTAGE OF TIME WIND BLEW FROM THE 16 COMPASS POINTS OR WAS CALM.  
 \* INDICATES LESS THAN 0.5% CALM.  
 25 HOURLY PERCENTAGES 25

**GULF OF MEXICO**

NOTE: Based on Hourly  
Observations 1951-60

LEGEND:  
 \*INDROSES S'LOW PERCENTAGE  
 OF TIME WIND BLEW FROM THE  
 16 COMPASS POINTS OR WAS CALM.  
 \*INDICATES LESS THAN 0.5% CALM.





The generalized maps presented in this publication have been selected from the Climatic Maps listed below or in preparation. The charts shown in this list are issued on separate sheets, 16 x 22 inches. Each sheet contains one or more maps and in some cases graphs and tabulations as indicated. They can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402. Checks or money orders should be made payable to Superintendent of Documents. Please order by Catalog number and title.

"Normal Daily Maximum, Minimum, Average, and Range of Temperatures (°F), January"....December. One sheet for each of the 12 months. These 4 elements are presented by maps on the front side and by graphs for selected stations on the back side of each sheet--12 sheets, each containing 4 maps and 1 chart. Price \$1.25 per set of 12 sheets. Catalog No. C52.11:T24/pt. 1-12.

"Mean Annual Number of Days Maximum Temperature 90°F and Above," including graphs and tabulation of mean monthly number of days 90°F and above for selected stations--1 map, 1 chart, and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:T24/6.

"Mean Annual Number of Days Minimum Temperature 32°F and Below," including graphs and tabulation of mean monthly number of days 32°F and below for selected stations--1 map, 1 chart, and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:T24/9.

"Mean Dates of Last 32°F Temperature in Spring and First 32°F Temperature in Autumn"--2 maps. Price 10 cents. Catalog No. C52.11:T24/3.

"Mean Length of Freeze-Free Period (Days)" with graphs showing "Mean Length of Period Between Last in Spring and First in Autumn of 32°F, 28°F, 24°F, 20°F, and 16°F, Respectively for Selected Stations," and also a tabulation of "Mean Date of Last 32°F Temperature in Spring, First 32°F in Autumn, and Mean Length of Freeze-Free Period (Days)" for selected stations--1 map, 1 chart, and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:F87.

"Standard Deviation of Monthly Average Temperature (°F), January-August"--8 maps. Price 10 cents. Catalog No. C52.11:T24/4.

"Standard Deviation of Monthly Average Temperature (°F), September-December"--4 maps and discussion of methods and application. Price 10 cents. Catalog No. C52.11:T24/5.

"Normal Monthly Total Precipitation (Inches), January-April"--4 maps.

"Normal Monthly Total Precipitation (Inches), May-August"--4 maps.

"Normal Monthly Total Precipitation (Inches), September-December"--4 maps. Price 30 cents per set of 3 sheets. Catalog No. C52.11:P91/pt. 1-3.

"Normal Annual Total Precipitation (Inches)" with graphs of "Normal Total Precipitation (Inches) by Months for Selected Stations" on back--1 map and 1 chart. Price 10 cents. Catalog No. C30.22/4:P91/7.

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"Mean Total Precipitation (Inches), Monthly, January-August (by State Climatic Division)"--8 maps. Price 10 cents. Catalog No. C30.22/4:P91/4.

"Mean Total Precipitation (Inches), Monthly, September-December (by State Climatic Divisions)" with "Division Names" on back--4 maps and 1 chart. Price 10 cents. Catalog No. C30.22/4:P91/5.

"Mean Annual Total Precipitation (Inches) by State Climatic Divisions" with graphs of "Mean Monthly Total Precipitation for Selected State Climatic Divisions" on back--1 map and 1 chart. Price 10 cents. Catalog No. C30.22/4:P91/2.

"Mean Annual Precipitation in Millions of Gallons of Water Per Square Mile by State Climatic Divisions," with "Mean Annual Precipitation in Millions of Gallons of Water Per Capita by State Climatic Divisions" on back--2 charts. Price 10 cents. Catalog No. C30.22/4:P91.

"Mean Annual Total Snowfall (Inches)" with graphs of "Mean Monthly Total Snowfall (Inches) for Selected Stations" on back--1 map and 1 chart. Price 10 cents. Catalog No. C30.22/4:Sn6.

"Mean Number of Days with 0.01 Inch or More of Precipitation, Monthly and Annual," including graphs and tabulation of mean values for selected stations--13 maps, 1 chart, and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:P91/6.

"Maximum Persisting 12-Hour 1000-mb Dew Points (\*F), Monthly and of Record"--13 maps and text. Price 10 cents. Catalog No. C30.22/4:D51.

"Mean Relative Humidity %, Monthly and Annual" including tabulations of frequency groupings and mean values for selected stations--13 maps, 1 chart, and 2 tabulations. Price 10 cents. Catalog No. C30.22/4:H88.

"Pan and Lake Evaporation;" maps of mean annual pan evaporation, pan coefficient, lake evaporation, May-October evaporation in percent of annual, and standard deviation--5 maps and text. Price 10 cents. Catalog No. C30.22/4:Ev1.

"Mean Percentage of Possible Sunshine, Monthly and Annual," including graphs and tabulation of mean values for selected stations--13 maps, 1 chart, and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:Su7.

"Mean Total Hours of Sunshine, Monthly and Annual" including graphs and tabulation of mean values for selected stations--13 maps, 1 chart, and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:Su7/2.

"Mean Daily Solar Radiation, Monthly and Annual"--13 maps, 1 tabulation. Price 10 cents. Catalog No. C30.22/4:So4.

"Mean Sky Cover, Sunrise to Sunset, Monthly and Annual" including graphs and tabulation of mean values for selected stations--13 maps, 1 chart, and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:Sk9.

"Prevailing Direction, Mean Speed (m.p.h.), and Fastest Mile of Wind, Monthly and Annual," with tabulation of "Fastest Mile and Direction of Wind"--13 maps and 1 tabulation. Price 10 cents. Catalog No. C30.22/4:W72.

